AVICULTURAL MAGAZINE

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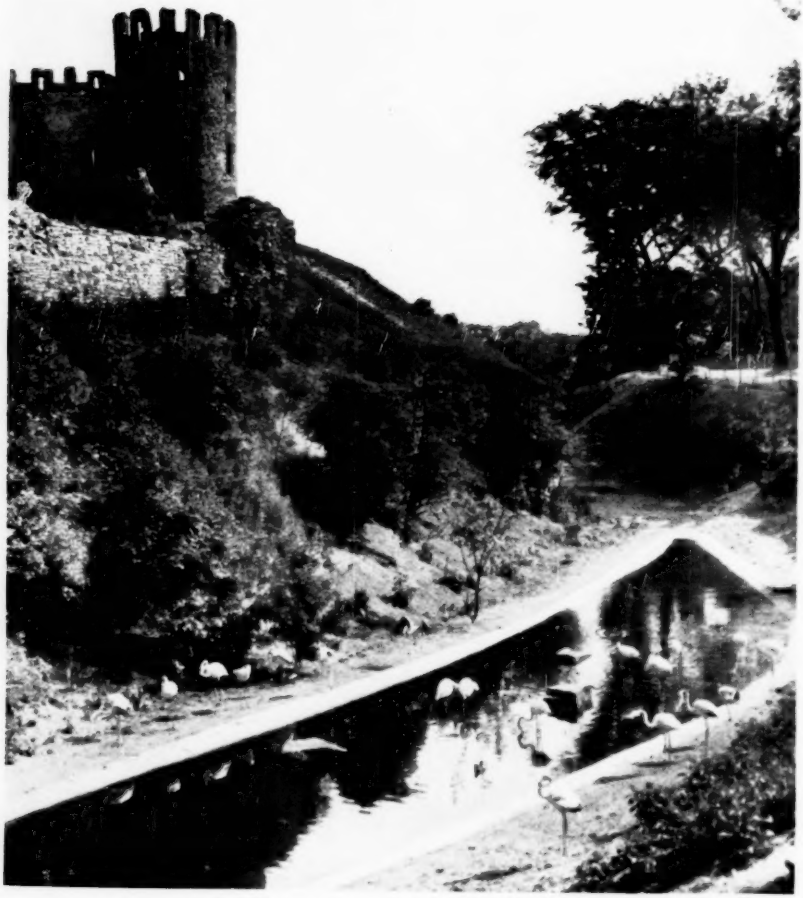

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DUDLEY ZOO

Paddocks for Flamingoes, Ducks and Geese in the old Moat.

AVICULTURAL MAGAZINE

THE JOURNAL OF THE
AVICULTURAL SOCIETY

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THE BIRD COLLECTION AT DUDLEY ZOO

By GEORGE A. J. WEAVER, F.Z.S.

Dudley Castle is situated in the heart of an industrial area in the Midlands and commands an excellent view of the surrounding countryside. This ancient castle, for centuries the seat of the Earls of Dudley, is mentioned in the Domesday Book, although it is thought to have been in existence some hundreds of years prior to this. The present Earl conceived the idea of creating a Zoo in the castle grounds and ruins, and work commenced in the early 1930's. On 6th May, 1937, the Zoo was opened to the public under the chairmanship of the late Mr. A. E. Marsh, this position now being held by his son, Mr. E. E. Marsh, and some months ago the Dudley Zoological Society became a public company.

As with many such institutions, Dudley suffered badly during the war and by 1946 the enclosures and buildings were in sad need of repair and stock had dwindled to a mere handful. The Society was extremely fortunate about this time in obtaining the services of Mr. D. Bowles, B.Sc., as General Manager, and as a result of his energetic and untiring efforts the Zoo again began to take shape, and to-day it houses a fine collection of exhibits, under far better conditions than it did pre-war. Repairs have been speedily effected, fresh stock acquired (we all know the pitfalls abounding in this direction), and thousands of bulbs have been planted to brighten the gardens in spring.

The original features of the Castle have been fully utilized in the planning of the Zoo, as, for example, the moat, which to-day is divided into sections to house seals and waterfowl. Although not a large collection compared with that of Regent's Park, the birds kept at Dudley are a representative selection and one is greatly impressed by the fine condition in which all specimens appear to be. The management and staff should be complimented on maintaining such good health and general appearance amongst their charges, particularly

during the present trying times when proper foodstuffs are difficult to obtain.

Sharing with ruminants the larger paddocks, some of which must be an acre or more in extent, will be found examples of Sarus, Demoiselle and Crowned Cranes, Black-shouldered Peafowl (which successfully reared chicks last season), and Red Junglefowl. The Sarus has, I believe, been in the collection some fifteen years and is a fine old bird. Another paddock is devoted to four Emus, unfortunately all male birds, which, of course, is a setback where breeding is concerned. However, they prove an interesting exhibit and serve to illustrate to the general public the size attained by some species.

The Bird of Prey avairies contain fine examples of Buzzard, Caracara, Bateleur Eagle, Griffon Vultures, Milky Eagle-Owl, Cape Owl, and Brown Owl. The Vultures built a nest in February, 1939, but did not achieve any success in hatching young.

The Pheasantry at Dudley is circular in design and is divided into compartments housing outstanding pairs of Impeyans, Blue Crossoptilons, and Edwards, the first two species being recent acquisitions from Leckford. Others of this family to be seen are Goldens, Silvers, Amherst (pure), Melanistic Mutants, and a few of mixed ancestry. My only regret is that space does not permit the housing of these beautiful birds in more spacious enclosures, an impossibility, alas! with many of our Zoos. An excellent specimen of a Red-legged Partridge is also on view and deserves mention.

There are several ranges of outdoor avairies dotted about the grounds, and amongst these will be found a nice collection of Budgies of various colours. Other compartments contain pairs of Cockatiels, Golden-mantled Rosellas, Redrumps, Indian Ringnecks, Roseate Cockatoos, and Senegals.

Another circular building is the Bird House, which is constructed of concrete and contains a fine selection of exotic species, Psittacines being particularly well represented. Here the visitor will find examples of Goffins, Citron-crested, Gang-Gang, Lesser and Greater Sulphur-crested Cockatoos, Stanleys and Alexandrine Parrakeets, Peach-faced Lovebirds, Festives, Yellow-fronted, Blue-fronted, and Red-topped Amazons, a White-fronted Caique, Red and Blue, Red and Yellow, and Illiger's Macaws, African Greys, and Purple-capped and Black-capped Lories. The last named has recently laid two eggs but unfortunately was not paired. Others of this family expected shortly are Plumheads, Golden-fronted Conures, and Pennants.

A large enclosure in the Bird House houses two superb specimens of Hartloub's Touracou in excellent condition and extremely tame. These birds, together with a pair of Ground Hornbills and various animals, etc., were brought back from Africa by the Head Keeper, Mr. H. Hatch, who also supervised the transportation and safe

delivery of a pair of hippos to Regent's Park. Another large compartment is devoted to the smaller Finches, including Bishops, Delamere, and Pintail Whydahs, Cordon Bleus, St. Helena Waxbills, Fire Finches, Avadavats, Reichnow's Weavers, and a Red-crested Cardinal.

Perhaps the most novel construction at the Zoo is the section devoted to wildfowl, which, as previously mentioned, is part of the old moat. Grass-covered banks, dotted with bushes, slope down to concrete pools and in the various pens of this section are to be found a nice selection of Ducks, Geese, etc. The ornithologist in particular would immediately be taken by two flawless pairs of Red-crested Pochard, a species rarely encountered by the average bird-watcher unless he be in the happy position that enables him to travel far afield and seek out such rarities. Colour is provided in these pens by Mandarins and Carolinas, while other species of Duck include Cape Teal, Ruddy Sheldduck, Rosybill, Falcated Teal, Wigeon, and Pintail. A fairly wide variety of Geese are also on view, consisting of Spurwings, Greater White and Blue Snow Geese, Barheads, Egyptian, Abyssinian, Canadian, Chinese, and Emden. Pairs of Black and Mute Swans are also on show, other water-loving species including Flamingoes, White Pelicans, Gannets, and Common Gulls.

Apart from a number of domestic and fancy Pigeons there are a few Turtle Doves, a Red Mountain Dove, Olive Pigeons, and a pair of Bronze-winged Pigeons. Other birds not yet mentioned include Ravens, Linnets, Jackdaws, Goldfinches, Guinea Fowl, and some fancy Bantams and Ducks.

The above list contains some ninety odd different species, the total number of birds being somewhere in the region of 230. This is a great improvement since 1946, and with further additions expected, will provide excellent interest to the aviculturist and ornithologist who can find the time to pay Dudley Zoo a visit.

* * *

AUSTRALIAN PARROTS IN CAPTIVITY

By Alan Lendon, Adelaide

(*Continued from p. 19*)

(1) Cockatiel (*Leptolophus hollandicus*)

Synonyms.—Cockatoo Parrot, Quarrion (in Queensland and in parts of New South Wales), Weero (in Western Australia).

Distribution.—Occurs over most of Australia ; is commoner in the northern parts and is rarely seen near the coast in the south.

Description.—The adult male is a slim, crested Parrot, whose prevailing colour is grey, relieved by a broad white band on the outer wing-coverts. The forehead, face, and base of the crest is yellow and the ear-coverts are orange ; the tip of the crest is greyish-black.

The adult female has duller orange ear-coverts and a rather dirty yellow face, the grey of the under parts and rump is freckled with creamy yellow and the tail feathers are also similarly spotted, the two lateral ones being more yellow than grey.

Immatures resemble the female on leaving the nest, but young males usually show a slightly brighter yellow on and around the face ; they usually assume the adult facial colouration when about five or six months old, but retain the speckled tail feathers until the first complete moult.

Variations.—Several subspecies have been described, but minor variations are common in a number of birds from any given locality, especially in the hens.

Coloured Plates.—Good plates are not common ; that in Greene (vol. i, p. 33) portrays the colouring of the male fairly accurately but gives the bird a fore-shortened appearance. Roland Green's plate in Mathews (vol. vi, p. 239) is quite good, except that the male has rather a pale face, while that of the female is too grey, and does not show the dirty yellow tinge.

Field Notes.—I have seen this bird in South Queensland on several occasions, either in pairs or in what appeared to be small family parties from the presence of a single adult male in the group.

Aviary Notes.—A very well known aviary bird, which has been kept and bred extensively, both in Australia and abroad. It is an excellent bird for a mixed collection as it agrees well with other Parrots and also with birds of other orders. It is one of the few Parrots that can be bred in a mixed collection, as a pair will often quietly but firmly appropriate a log and are usually able to defend it successfully against the most aggressive of the broadtails ; it can also be bred in a colony, provided there is not an excess of cock birds and that reasonable space is provided.

My first experience in breeding this species was in 1935–6. A pair obtained in August of the former year nested in November and hatched two young from a clutch of five eggs ; only one of these survived and it left the nest in mid-January ; it proved to be a cock and had attained adult facial plumage in July. Three further young were hatched in March but did not survive long. In the spring of 1936 four eggs had been laid by 20th September and five young were seen on 13th October, these were all reared and left the log between the 12th and 19th November. A second clutch was started immediately thereafter, but none of this or a subsequent clutch laid in January were reared successfully. In the spring of 1937 eggs were laid in the middle of August and four young left the nest between the 10th and 17th October. The second clutch, consisting of six eggs, was completed by the end of October ; all of these were hatched and reared, the last leaving the nest on Christmas Eve.

Since then I have bred a good many Cockatiels, but seldom more than two or three to a clutch. The birds have usually had three or four clutches each season, but have invariably spoilt one or more by laying before the young of the previous clutch have left the nest. On these occasions the young have frequently been badly plucked about the head and face ; presumably the parents have resented their presence in the nest after having laid again.

It is well known that the cock Cockatiel shares the duties of incubation, sitting from early morning to late afternoon while the hen carries on for the remainder of the twenty-four hours. Both sexes feed the young but I cannot recall ever having seen a cock feed his mate.

It has always been my opinion that the Cockatiel is more closely related to the Cockatoos than to the true Parrots, partly on account of both sexes brooding and partly because of the sexual differences in plumage which are, to my mind, analogous to those which occur in the Black Cockatoos, especially in the two red-tailed species.

The Avicultural Society of South Australia deemed the Cockatiel ineligible for its medal, as it was known to have been bred on numerous occasions prior to the Society's foundation in 1928. It is strange that a bird which has bred so freely in captivity and become domesticated in several countries has not produced any mutations ; I have been informed that a fawn or cinnamon sport has been bred in a country town in this state, but I have not been able to verify this statement.

A cock Cockatiel when first introduced to a hen, especially if he has led a bachelor existence for some time, usually indulges in a rather comical display consisting of a series of rather absurd looking hops while following the hen along the ground, and accompanied by a low warbling variant of the usual shrill call note. Apart from this preliminary courtship, I have never seen a cock display to his mate, and although devoted to each other and indulging frequently in

mutual preening, they are quite easily consoled after the loss of a mate and readily pair up when a newcomer is introduced.

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(2) Red-sided Parrot (*Lorius pectoralis*)

Synonyms.—Red-sided Eclectus, Rocky Parrot (by the residents of Cape York).

Distribution.—Confined as far as Australia is concerned to a portion of Cape York Peninsula, North Queensland, but also found in New Guinea and some of the adjacent islands.

Description.—The adult male is a large short-tailed Parrot, of a predominantly bright green colour, relieved by a patch of red on the sides of the body which extends under the wing. The upper mandible is red with a yellow tip and the lower is black.

The adult female is strikingly different, being mainly of a reddish crimson colour, except for a purplish blue abdomen and a blue band across the upper back. The mandibles in this sex are black.

The immature birds of each sex closely resemble the adults, being only slightly duller in coloration.

Variations.—It is extremely doubtful if the Australian bird can be separated from the one found in New Guinea.

Coloured Plates.—The plate in Greene (vol. iii, p. 89) is a fairly good representation of the two sexes. That by Roland Green in Mathews (vol. vi, p. 248) is not very good, inasmuch as both birds are shown in rather unnatural postures and the male is drawn in a position which does not exhibit the conspicuous red flanks, whilst the blue of the female is much too violet in shade. Grönvold's plate in *The Emu* (vol. xiv, plate F) is a reasonably good representation of a male.

Field Notes.—I have not seen this bird, but observed the closely allied Grand Eclectus (*L. roratus*) on Morotai ; they are usually seen singly, and had a slow flapping flight and uttered their harsh call note at intervals while flying.

Aviary Notes.—Although I kept a hen Grand Eclectus for several weeks on Morotai, I have no personal experience of the species under review as, although I once owned a pair, I exchanged them before actually taking delivery of them.

These birds have been represented in the Adelaide Zoo collection almost continuously since 1908, and although many eggs have been laid and several young have hatched complete success has never been achieved. In Taronga Park Zoo, Sydney, several pairs of these birds have been kept together in the one aviary for many years and a considerable number of young have been reared, but I think I am correct in saying that, apart from a few of the first breedings, the young have been removed from the nests and hand-reared after

reaching a certain stage of development. For further details the reader is referred to the articles by Patten in AVICULTURAL MAGAZINE, 1939, p. 288, and 1944, p. 123. It would appear that the hen bird alone incubates and that the cock feeds the hen but has not been observed to feed the young; this latter point, however, requires corroboration.

I have no record of birds obtained in Australia being kept in captivity other than on Cape York; all the published observations deal with birds obtained from New Guinea or their aviary-bred descendants.

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(3) RED-CHEEKED PARROT (*Geoffroyus geoffroyi*)

Distribution.—As far as Australia is concerned, this bird is only known from Cape York Peninsula, but an apparently identical bird is found in New Guinea and some of the near-by islands.

Description.—A medium-sized short-tailed, mainly green Parrot in which the male has the face, forehead, and throat pinkish-red and the crown and back of the head a bluish-violet. The beak in this sex is red, with a yellowish tip. The female differs from the male in that she has the whole of the head and face of a brownish-grey colour and the beak is black. The immatures are said to resemble the female and judging by the analogy of a closely allied species the young males should show a pinkish tinge on the head.

Variations.—Like the foregoing species, it is probable that this bird cannot be separated from the New Guinea form.

Coloured Plates.—These are few in number. That of a pair by Roland Green, in Mathews (vol. vi, p. 253), is quite good, and the plate by Grönvold, which appeared in *The Emu* (vol. xiv, plate F), when the bird was first discovered in Australia, is reasonably good of a male. There is also a plate of the male of the closely allied, if not identical, bird from the Aru Islands, in the AVICULTURAL MAGAZINE, 1931, p. 181.

Field Notes.—I have not had an opportunity of seeing this species but the closely allied species (*G. cyanicollis*) was common on Morotai and I have recorded my observations on its habits in the AVICULTURAL MAGAZINE, 1946, p. 209.

Aviary Notes.—I have never seen this bird in captivity. Cayley records that a few specimens, obtained from New Guinea, were kept in Taronga Park Zoo for a short time and I remember that the Adelaide Zoo had correspondence just prior to the 1939–1945 war with a person in Central Queensland who claimed to have a pair. The few records of members of this genus in captivity in England stress the extreme delicacy of the birds, possibly on account of unsuitable feeding; my impression is that the genus is probably a fruit-eating one.

Before passing on to the next genus, reference should be made to a large black and red Parrot which has been seen on Cape York on several occasions but has never been collected. The writer is of the opinion that this will eventually be proved to be the strange Pesquet's Parrot (*Psittrichas fulgidus, olim Dasyptilus pesqueti*), of New Guinea, figured in AVICULTURAL MAGAZINE, 1936, p. 175, which has been imported into England and several of which have been exhibited in Taronga Park Zoo in recent years.

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(4) BARRABAND PARRAKEET (*Polytelis swainsonii*)

Synonyms.—Superb Parrot (R.A.O.U. Checklist, 1926). Green Leek (name commonly used in districts where it occurs).

Distribution.—Occurs only in parts of Victoria and New South Wales and appears to be practically confined to the vicinity of the upper Murray River and its tributaries.

Description.—The adult male is a slim, long-tailed Parrot of a predominantly bright green colour, the forehead and throat are orange-yellow and there is a crescent of scarlet below the yellow on the throat. The female is a much duller green and lacks the yellow and red adornments ; she has, however, a few red feathers on the legs, and the inner webs of the tail-feathers, apart from the central pair, are pink.

The immatures resemble the female, but the green of the young males is of a slightly brighter shade, especially on the head, and there is often a suspicion of rose where the red crescent will ultimately develop, and a few young males show a distinct yellowish wash on the forehead and throat. It is not always possible to sex individual juveniles, but some of each sex can usually be picked out with certainty from a clutch. Adult male plumage is attained by a slow moult which usually begins when the young birds are between six and nine months old and is not completed in most cases until the birds are from twelve to fifteen months old.

Variations.—There do not appear to be any valid subspecies.

Coloured Plates.—Boosey's illustration of a male in Tavistock (p. 98) is the best that I am aware of ; Roland Green's, in Mathews (vol. vi, p. 261), is quite good of the female but not as good of the male ; Grönvold's in Seth-Smith (p. 122) is poor, whilst the plate in Greene (vol. i, p. 67) portrays the male plumage accurately but does not adequately convey the bird's slim lines.

Field Notes.—My only personal acquaintance with this species consists of seeing a pair in flight while motoring from Melbourne to Sydney in November, 1933. Mr. F. Lewitzka, of Enfield, S.A., informs me that while in camp at Wagga, New South Wales, he observed these birds on many occasions and noticed them feeding on straw which had been used for thatching huts.

Aviary Notes.—This species is a most desirable aviary bird, being hardy, long-lived, and peaceful in a mixed collection. Newly trapped birds are extremely timid and very unsteady, and take a considerable time to quieten down ; in any case, this species seldom becomes as tame and confiding as do most examples of the other two members of its genus. Barrabands particularly resent being handled and keep up a continuous squawking when so treated or even when placed in a confined space, such as a travelling cage.

My early experiences in breeding this species were with a pair consisting of a cock in adult plumage and of uncertain age obtained in 1937 from the late Mr. Wachsmann, of Sydney, and a hen bred by Mr. Waddel, of Melbourne, in 1937 and obtained from him in 1939. This pair had been kept segregated since the hen was acquired but it was not until 1945 that any attempt at breeding occurred. In October of that year a clutch of five eggs was laid ; young were first heard on 10th November and five could be counted on the 19th. The first two left the nest rather prematurely on 13th December, the temperature on that day being well over the century. On the following day, which was equally hot, a third youngster was out of the nest on the ground and the remaining two, although almost fully feathered, were dead in the log. The third young bird died the following day but the two eldest survived and appeared from the first to be a true pair. Mr. Koenig, of Ararat, Victoria, obtained these birds from me and subsequently informed me that the cock was coming into colour by the end of October, 1946, and was fully coloured by the end of March, 1947.

In 1946 the old pair again laid five eggs in October ; on this occasion all were hatched and duly reared and proved to be one cock and four hens as was thought to be the case soon after they first left the nest ; the cock bird in this case was not as obvious as the bird of the previous year, but he was nearly in full colour when I parted with him when he was nine months old.

In 1947 the hen started her clutch in October with a soft-shelled egg, but thereafter incubated steadily, and it was not until the middle of November that I had an opportunity of inspecting the nest and found that it contained one addled egg and another containing a fully developed dead embryo. The old hen died suddenly in February, 1948, and the cock, who had not moulted satisfactorily, only survived her by a few months.

This season (1948) I mated one of the hens bred in 1946 to an unrelated cock, and at the time of writing (end of November) they have three large young in the nest.

This species, judging by its disposition, would almost certainly breed if several pairs were kept together in a sufficiently roomy aviary ; in fact, I think I have read of success being achieved under such

conditions. I have no record of this bird ever being other than single brooded. The male usually feeds the hen when she leaves the log for the first week or two after the young hatch, but thereafter he usually helps the hen by feeding the young directly. The display and the hen's gestures when she wishes to be fed by her mate are quite comical and are well described in Tavistock (pp. 254–5).

Breeding records in South Australia are not very common. The A.S.S.A. medal was awarded in 1939 to Mr. Banyer, of Blackwood, and the species has bred in the Adelaide Zoo on a couple of occasions.

Barrabands are extremely susceptible to ophthalmia (eye disease), and, although cures are claimed, in most cases that I have observed the disease has seemed to reach a chronic state with some persistent swelling of the lids. Paralysis of the legs occurs occasionally and, if not fatal, leaves the victim hopelessly crippled.

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(5) Rock Pebbler Parrakeet (*Polytelis anthopeplus*)

Synonyms.—Regent Parrot (R.A.O.U. Checklist, 1926), Smoker Parrot—the name most commonly used both in Victoria and Western Australia, Black-tailed Parrakeet—the earliest name.

Distribution.—Confined to the region of the lower Murray River and the adjoining mallee country of New South Wales, Victoria, and South Australia ; also found over a wide area in South-Western Australia.

Description.—A rather large, plump, long-tailed Parrot. In the adult male the predominant colour is a rich mustard-yellow ; the mantle is an olive-green and there are some dark carmine markings on the inner wing-coverts, while the tail is a very dark blue-black. The female is similarly patterned, but the yellow is replaced by an olive-green and the tail is green with the inner webs of all but the central feathers a pale rose-pink. The young resemble the female on leaving the nest, but the young males in a clutch can usually be identified by the slightly yellower tinge in the green coloration particularly on the head. They begin a slow moult at about the age of six months, when the bright yellow feathers begin to appear on the head and breast, full adult male plumage being usually reached when the bird is about fourteen or fifteen months old.

Variations.—The Western Australian birds form a good subspecies (*westralis*), the males being greener and never attaining the bright yellow shade of the Eastern form while the females are brighter and less of an olive-green shade.

Colour Plates.—The plate of a male in Greene (vol. iii, p. 65) is very good except that the tail is a little too short. The plate in Mathews (vol. vi, p. 266), by Roland Green, is only fair ; the male

figured, although an eastern bird, is not bright enough, and the colouring of the tail gives an erroneous impression ; the female is quite good, although looking rather more like the eastern form than the western which it is supposed to be.

Field Notes.—My only acquaintance with this bird in the field is a recent one in that I noticed three birds, apparently one male and two females, from the window of a train near Southern Cross, Western Australia. In flight they certainly give the impression of being predominantly yellow birds.

Aviary Notes.—A quiet, attractive aviary bird, soon becoming relatively fearless and always very inoffensive in a mixed collection. Young birds taken from the nest and hand-reared make pleasing pets and excellent whistlers.

My early breeding successes with this species were with a pair, which consisted of a cock which was in adult plumage when I obtained him in 1938 from a local birdshop and a hen obtained for me during 1940. It was not until 1944 that any success was obtained, although some interest in a log had been evinced in the previous year. In 1944 the first egg of a clutch of four was laid on 25th September, and three young were seen on 22nd October, the fourth egg having disappeared. One of the young birds died when a week old, but the remaining two survived and both left the nest on 27th November, one being a little more mature than the other. These proved to be two cocks, as was thought likely when they were first fledged, and had attained full adult plumage at the age of fourteen months. In 1945 the same pair of birds had a clutch of five eggs in late September, and hatched them all, but only reared three, two dying when quite large and the survivors leaving the nest in late November ; these were correctly diagnosed as two cocks and a hen. In 1946 the clutch of five was commenced in mid-September ; four were hatched, but the youngest left the nest prematurely and, although replaced repeatedly, it was ultimately found dead on the ground ; the remaining three were successfully reared and proved to be all hens, although not accurately diagnosed on this occasion. In 1947 five young were hatched, one died early, and the remaining four were successfully reared.

The old pair's career was terminated by the hen's death in the winter of 1948 after an unsatisfactory moult. A new hen was obtained shortly afterwards, and at the time of writing (late November) a fine brood of six young have just left the nest.

Rock Pebblers have been bred on a good many occasions in South Australia, S. J. Harry, of Brighton, securing the A.S.S.A. medal in 1934, although C. H. A. Lienau bred them prior to the establishment of the Society during World War I. Other successes have been those of H. J. Packer, I. Banyer, and the Adelaide Zoo.

Rock Pebblers seem to be invariably single brooded, as I can find

no definite record of two clutches having been laid in the one season. The male assists with the feeding of the young as soon as the female ceases to brood them more or less continuously, usually about the tenth to twelfth day; prior to this he usually feeds his mate whenever she leaves the nest.

The display is somewhat like that of the Barraband, but not usually so elaborate; the hen, about the time of laying, frequently importunes her mate to feed her in the same way as a Barraband hen does.

Rock Pebblers are prone to eye disease, but it is by no means as frequently seen in them as in the case of Barrabands.

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(6) Queen Alexandra Parrakeet (*Polytelis alexandrae*)

Synonyms.—Princess of Wales Parrakeet, Rose-throated Parrakeet, Spinifex Parrot, Princess Parrot (R.A.O.U. Checklist, 1926).

Distribution.—Little is known of its exact range, it has been found spasmodically in various parts of Central Australia and the interior of Western Australia.

Description.—A slim Parrot with a very long tail, clothed in pastel shades. In the adult male the crown of the head is light blue, the mantle is olive, the wing-coverts yellowish-green, and the rump violet. The throat is pink, the breast and abdomen greyish-green with some pink on the thighs and the under tail-coverts are olive-green. The central tail-feathers are very long and olive in colour, all the others have the inner webs rose-pink. The third primaries have the peculiar spatulate elongation, which is often abraded and lost some time prior to the moult; I have no definite record regarding the age at which this feature is first acquired.

The adult female never has the spatule, and her tail is never as long as is that of the male. In addition, the rump is always rather slaty in colour, the blue on the head is replaced by a greyish-mauve, and the wing-coverts are greener. The beak, which is a coral-red in the male, is darker in the female. Immatures tend to resemble the female, but the pink on the throat and thighs is considerably brighter and more of a puce shade; they are not very easy to sex, but the young males have larger, flatter heads and tend to be a little brighter on the crown. Adult plumage is acquired rather slowly and more or less imperceptibly between the age of twelve and fifteen months.

Variations.—No valid subspecies are described, but it would appear that not all males acquire the vivid violet colour on the rump.

Coloured Plates.—These seldom do justice to the bird's exquisite colouring. Roland Green's plate in Avicultural Magazine, 1935, p. 120, is probably the best, but it makes the mantle and breast appear somewhat brownish in shade; the same artist's plate in Mathews

(vol. vi, p. 271) portrays one of the duller birds and does not show the spatules on the wings.

Field Notes.—Very few ornithologists have seen this bird in the field and I have not been one of the fortunate few. It would appear to be a naturally fearless bird from all accounts. Mention has frequently been made of its alleged habit of resting along a thick branch instead of perching in the ordinary manner ; this peculiarity is certainly not noticeable in captivity.

Aviary Notes.—This species has always been extremely popular and much sought after as an aviary bird, and in the last twenty years has been bred so freely in Australia generally, and in South Australia in particular, that it can now be regarded as domesticated. Its delicate colouring, elegant shape, and tameness have always had a wide appeal for bird-lovers, but individuals and pairs have been singularly variable in their behaviour and readiness to breed in captivity.

My personal experiences with this species have been very disappointing, as the following account will show. My first pair were obtained late in 1935 and were extremely tame ; the hen laid three eggs late in October of the following year and then proceeded to produce, with increasing difficulty, a series of soft-shelled eggs, which eventually proved fatal to her. A new hen, obtained late in November, 1936, laid two eggs early in the following month but broke them both ; two more eggs followed and were incubated, but although one of these was fertile, it failed to hatch. During the next three seasons no eggs were laid although the hen came into breeding condition in September of both 1938 and 1939. The cock was changed prior to the 1940 season but without any improvement in results. In 1941, however, five good young birds were reared, and it was hoped that the tide had turned at last. Success was short-lived, however, for although eggs were laid in 1942 they were ejected from the log, and in 1943 no eggs appeared at all. In 1944 a clutch of five was commenced late in September, but only two eggs proved fertile ; of these, only one hatched and the youngster survived a few days only, probably because the hen stopped brooding it at night far too soon. For the 1945 season a new cock bird was tried, the immediate result being a series of soft-shelled eggs. Later in the season another soft-shelled egg was followed by a good one, which was incubated but proved infertile. August, 1946, saw the introduction of a new hen, an aviary-bred bird nearly two years old. She came into breeding condition almost at once and laid a clutch of five early in September, one of them on the ground. Only two of the remaining four were fertile and one of these hatched early in October, the other failing to emerge from the shell. This solitary youngster was reared successfully. High hopes were entertained in 1947 when the hen started laying in mid-September, but she became egg-bound with her fifth egg and, although she

continued to sit after eventually laying this egg, the other eggs were spoiled and none of them hatched. I thought she was going to lay again late in October, but nothing eventuated. The present season (1948) started poorly, the first egg, laid in mid-September, being soft-shelled ; however, four good eggs followed, but only two of these were fertile and only one hatched and was eventually reared. Before this bird left the nest the hen had started to lay again ; this time four out of the clutch of six were fertile and duly hatched, and at the time of writing (mid-December) four young birds are progressing satisfactorily. From the foregoing it will be seen that my experiences with this species have been anything but smooth, and although many aviculturists have reliable breeding pairs, such as the famous one at the Adelaide Zoo (*vide* AVICULTURAL MAGAZINE, 1947, p. 58), many others can recount experiences similar to mine and also complicated by egg-eating hens and non-feeding cocks.

The eggs of the Queen Alexandra are unique amongst those of Australian Parrots by virtue of their highly glossed appearance.

The A.S.S.A. medal for breeding this species was awarded in 1928 to F. P. Kell ; there are, however, several earlier records of which the first appears to be that of Zietz, in 1899.

More often than not the species appears to be single-brooded although there are plenty of hens that invariably have two nests in a season. Individual cocks vary enormously in their habits, some being assiduous feeders, both of their mates and young, whilst others are of no help whatever and are sometimes even a hindrance to the hen in her task.

The display is somewhat like that of the Barraband, but is even more ludicrous to human eyes ; cocks, when displaying, are able to erect a few feathers in the frontal region in the form of a tiny crest.

Fortunately this species does not seem to be nearly as susceptible to eye disease as are its near relatives.

Community breeding has been successfully practised on a number of occasions but plenty of nesting sites and a spacious aviary are necessary to avoid undue interference ; generally speaking, segregated pairs are more satisfactory.

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(7) KING PARRAKEET (*Aprosmictus scapularis*)

Synonyms.—Australian King Parrot (as opposed to the other members of the genus occurring in the islands to the north of Australia), Scarlet and Green Parrot.

Distribution.—The coastal belt of Eastern and Southern Australia, from Cairns in North Queensland to about 100 miles to the east of Melbourne in Victoria. Mainly a bird of the well-timbered, hilly country.

Description.—A heavily built large Parrot, with a long wedge-shaped tail. The adult male has the head and underparts scarlet, the back and wings are dark green, relieved by a light green stripe or " butterfly " on the wings, the rump is dark blue, as also is a narrow band across the back of the neck, and the tail is black. The upper mandible is orange-red with a blackish tip.

The adult female differs in having the head, breast, and tail green, the rump is a duller, rather greenish blue, and there is only occasionally a faint " butterfly " stripe on the wings ; the upper mandible is black.

Immature birds resemble the female on leaving the nest. I have never found them easy to sex, but Tavistock (AVICULTURAL MAGAZINE, 1932, p. 295) states that " they can be sexed quite easily within a few weeks of leaving the nest, as the bills of the females quickly darken while those of the males are of a yellowish colour ; young hens also are more slender than their brothers, with smaller heads, and they have much less red on the abdomen and lower breast ". Adult male plumage is obtained by a slow moult which starts when the bird is something over fifteen months old and is not completed until the bird is between $2\frac{1}{4}$ and $2\frac{1}{2}$ years old.

Variations.—The birds from the northern extremity of the range have been given subspecific rank (*minor*) ; they are said to be smaller with the red colouring of a darker shade ; whether this is a constant feature I am unable to say.

Coloured Plates.—Not many good plates exist. Roland Green's, of a pair, in Mathews (vol. vi, p. 291), is very good. The plate of a male in Greene (vol. i, p. 93) is poor in that there is too much blue on the mantle and tail and the pale green wing-band is not shown.

Field Notes.—I have seen this bird on several occasions in the Dandenong ranges, near Melbourne. Wild birds can usually be seen in the Sir Colin Mackenzie Sanctuary, near Healesville, Victoria ; they are fairly tame and are attracted by the food provided for the inmates of the Sanctuary.

Aviary Notes.—This species is reasonably hardy and long-lived in captivity but, although gaudily coloured, it is a rather sluggish and somewhat uninteresting inhabitant of an aviary. It is rather a heavy, clumsy flier and needs a large enclosure to be seen at its best. It has, however, the advantage of being relatively peaceful and unaggressive in a mixed collection.

Kings are one of the species that I have not yet succeeded in breeding ; a hen that I had from 1936 to 1947 with two different mates used to raise my hopes by coming into breeding condition in November. In 1946 I felt certain she was going to lay as she spent a lot of time in a large log, but nothing eventuated. A new hen was obtained in 1947, and although she gave no indication of breeding that year she came into breeding condition early in November the following year

and proceeded to lay four eggs either from the perch or on the ground, being quite disinterested in the two large logs provided. Only one of these eggs was unbroken and it was placed under a pair of Adelaide Rosellas but it proved infertile.

Kings are notoriously difficult to satisfy as regards nesting accommodation, they appear to favour a very long log, the bottom of which is resting on the ground. On a good many occasions they have been known to lay in a seed tray or a box on the ground, or even in a hollow that they have scratched out on the ground and success has been achieved under these apparently unfavourable conditions.

The medal of the A.S.S.A. was awarded in 1940 to Mrs. Isaacson for breeding this species for the first time in South Australia. Her birds were housed in a relatively small, entirely covered, shed-like aviary and had been there about three years before nesting. They chose a log about 5 feet from the ground, laid late in November, and hatched and successfully reared two young birds which left the nest towards the end of January.

Apart from the foregoing, I am only aware of the three following successes in South Australia. A single bird was bred in the Adelaide Zoo in 1940, and in 1946 Mr. I. Banyer, of Blackwood, reared two young birds, the father of which was still in immature plumage without any sign of the red head whatsoever. I am not aware of any other recorded breeding of this species with an uncoloured male, though presumably it occurs in the wild state. The male bird referred to came into full colour in a much more rapid moult than usual shortly after the young were fledged, and the same pair have bred again since then. Mr. H. Bradley, of Plympton, appears to have been the most successful local breeder. Having kept a pair of these birds for many years, they proceeded to come good with a vengeance and reared four young in 1946 and five in each of the two succeeding years.

The display of this species is described at length in Tavistock (p. 244). Shortly before the onset of the moult, the scarlet coloration fades appreciably to an almost brick-red. Other than at the time of the moult, birds showing this colour are invariably old or in poor health.

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(8) Crimson-winged Parrakeet (*Aprosmictus erythropterus*)

Synonyms.—Red-winged Parrot (R.A.O.U. Checklist, 1926), Blood-winged Parrot.

Distribution.—Its range extends from the Kimberley district in North-western Australia through the Northern Territory to Queensland and Northern New South Wales. It has also been recorded from Southern New Guinea but there appears to be some doubt as to whether the bird found there is identical with the Australian or with

the Timor species. In Australia the bird favours mainly open timbered country.

Description.—A moderately large Parrot with a rather short, wedge-shaped tail. The adult male has the head and underparts a vivid light green, the mantle is a peculiar purplish-black colour, the rump is a vivid blue, and there is a broad crimson band on the border of the wing.

The adult female is often a slightly larger bird and is a duller green, without the dark mantle and with a lighter blue rump ; there is a band of red on the margin of the wing which varies considerably in width but is always much narrower than in the male.

Immatures closely resemble the female and are extremely difficult, if not impossible, to sex with any certainty. The width and extent of the red wing-bar is quite unreliable as evidenced by the experience of a well-known local Parrot fancier who attempted not long ago to sex a brood of four young Crimson-wings ; he put rings on the birds he believed to be young cocks, judging by the extent of the red bar, and time proved him to be exactly 100 per cent wrong ! A recent close inspection of another brood of four young birds made me think that the intensity of the blue on the rump might be a guide to sex, but I have not had the opportunity of following up this hunch. Adult plumage is not attained by the cocks until they are over two years old ; frequently, however, their sex is revealed by the appearance of a few dark feathers on the mantle or extra red ones on the wing when they are between fifteen and eighteen months of age. This, however, is not invariably the case, and many aviculturists have kept a bird for many months believing it to be a hen only to be ultimately disillusioned by the eventual appearance of one of these tell-tale feathers.

Variations.—Northern birds are said to be smaller with a deeper shade of crimson on the wings, but I have grave doubts as to the constancy of this difference and as to whether it warrants the establishment of a subspecies.

Coloured Plates.—Roland Green's plate, in Mathews (vol. vi, p. 279), is an excellent portrayal of the two sexes. Greene's plate (vol. i, p. 71) is quite good of an adult cock.

Field Notes.—During a few hours spent in Darwin late in 1945 I was delighted to see a single bird of this species. Its flight is buoyant and erratic and quite unlike the heavy, rather laboured flight of the King ; in fact, I consider that they are erroneously placed in the same genus.

Aviary Notes.—Once established, this species is relatively long-lived in captivity, but newly trapped birds are always delicate and doubtful propositions and even aviary-bred birds are apt to be upset by a move. Cocks are often very spiteful, not only towards their mates but also towards other nearly related species, although they will seldom cross swords with a Broadtail. Individuals vary very considerably in their

behaviour towards their own mates, but most cocks indulge in a certain amount of wife-beating, especially in the breeding season ; apart from the loss of a few feathers little harm seems to result in most cases. This species makes a most attractive aviary bird on account of its brilliant colouring, and being active birds they consequently make a good display in a mixed collection.

Crimson-wings are another species that I have been relatively unsuccessful with both as regards longevity and breeding. However, a pair, of which the cock was obtained in 1937 and the hen the following year, were more satisfactory in both respects than most of my earlier acquisitions. They first nested in 1941, laying in a log which was standing vertically on the ground and rearing two young, which proved eventually to be hens. The following year they laid a number of eggs, none of which were hatched, and in 1943 the hen died egg-bound and her mate did not survive much longer. Another pair, which I brought home from Queensland early in 1944, lived until quite recently, but although considerable interest was usually evinced early in the spring of each year no eggs were ever laid.

Crimson-wings frequently come into breeding condition early and also start to moult correspondingly early, and I often wonder if these birds are derived from the Northern Territory and are following the usual habits of Northern Rosellas and Hooded Parrakeets in this respect.

The A.S.S.A. medal for breeding this species was awarded to the late E. Baxter Cox in 1935 ; the records of this breeding have unfortunately been lost. A good many subsequent successes with the species have been recorded but I know of none in which the cock has been an uncoloured bird.

Like Kings, Crimson-wings are sometimes difficult to satisfy as regards a nesting site, and in many cases they seem to prefer a deep log extending to ground level.

Reports suggest that this species is, in part at any rate, a nectar-feeder, and I have often wondered whether this fact accounts for the delicacy of newly trapped birds.

The display of the Crimson-wing is fully and excellently described in Tavistock, on pp. 250–1.

(*To be continued*)

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SOME NOTES ON THE MOULT OF THE LONG-TAILED DUCK

(*Clangula hyemalis*)

By FINN SALOMONSEN

The sequence of plumages in the Long-tailed Duck (*Clangula hyemalis*) is very complicated and has long aroused the interest of ornithologists. For many years Scandinavian students have maintained the existence of three annual moults, a view which has not until recently been generally accepted. A few years ago I published a study on this subject (*Journ. f. Ornith.*, vol. 89, 1941, pp. 282–337) based on the unique material of about 650 skins in the Zoological Museum of Copenhagen. I came to the conclusion that the moulting phenomena in this peculiar bird was still more complicated than hitherto suspected, and that it was most convenient to divide the annual sequence of plumages into four, viz. the well-known " ornamental or winter-dress ", the " nuptial or summer-dress ", the " eclipse-dress ", and the new " autumn-dress ". However, it was expressly emphasized that no feather-germ produced more than three annual generations of feathers. My results gave rise to the following remarks from Messrs. Delacour and Mayr in their modern treatise of the Duck tribe (*Wilson Bull.*, vol. 58, 1946, p. 107) : " These are rather startling conclusions, but we lack the material to discuss them critically." In spite of a still more pronounced deficiency of material, Mrs. Vesta Stresemann has not put the same restraint on herself as the said authors, but has recently published a paper of some length in the December issue of AVICULTURAL MAGAZINE (" Eclipse-Plumage and Nuptial Plumage in the Old Squaw or Long-tailed Duck," vol. 54, no. 6, 1948, pp. 188–194), the main theme being a criticism of my results. As I do not agree with the conclusions in the paper by Mrs. Stresemann, I think it advisable to add some comments and to answer some of the questions asked for by the authoress, especially as my paper, written in a German Journal, is probably not easily accessible to English readers.

Mrs. Stresemann reproaches me (p. 189) that I have included the moult of the wing in the eclipse-moult. " It appears absurd that the bird would wear an eclipse wing in its highly evolved specific plumage." I did not lay any stress on this point, but have only followed the common usage in conformity with Witherby, Schiøler, etc., who all have used the same procedure. The wing-moult continues the eclipse-moult in the Ducks and is therefore united with this as one " moult " by most authors, but Mrs. Stresemann is no doubt right in her assumption that the hormonal balance necessary for producing ornamental feathers is reached just before the wing moult, with the

consequence that the new wing must be looked upon as a part of the ornamental—not of the eclipse—plumage. Mrs. Stresemann maintains the view that feathers produced under different physiological conditions cannot be regarded as belonging to one and the same dress, and on the basis of this viewpoint the wing moult naturally cannot be united with the eclipse moult. However, such a clear-cut distinction is too theoretical and would make it impossible to admit the existence of all compound plumages. No students would, e.g. deny the development of a certain " summer-dress " in the Guillemot (*Uria aalge*), although only the head moults in spring and more than four-fifths of the feathers of the summer dress are retained from the winter dress. In many species which moult during a long period the appropriate threshold of certain hormones influencing the feather pattern is reached in the course of the moult (e.g. in the Ptarmigan), and this circumstance accounts for the variegated aspect of the final plumage. In such cases it would be irrelevant to claim that the feathers belonging to this very dress should be produced under the same physiological conditions. So I should rather leave this complicated question open, and in the meantime use the division adopted by Witherby, etc., concerning the wing moult in the Ducks.

Mrs. Stresemann further is of the opinion that the nuptial or summer plumage, for which she adopts Millais' term " semi-eclipse ", is not a special dress, but only the half-finished eclipse-plumage. Nevertheless, she is aware that the scapulars are moulted twice, both during the summer-moult as well as during the eclipse-moult. I have maintained the two plumages in question only on the basis of this double moult of the scapulars, and no one has ever postulated any double moult of other areas of the plumage. However, it appears to me that this is sufficient to admit the existence of two plumages. How else is it possible to describe a plumage with two different sets of feathers of a certain, definite region ? Could it be called " eclipse plumage ' A ' and ' B ' " ? This would be especially absurd in this species, in which the scapulars form such a dominant part of the plumage, and the two generations of scapulars are so strikingly different that they no doubt have different biological tasks. To unite the summer plumage and the eclipse plumage in the Long-tailed Duck would be to deny facts.

The explanation of the biological value of the summer-plumage by the authoress is exactly the same as I have given in my paper, pp. 331–2, so I certainly agree. Mrs. Stresemann only does not concur with my opinion that this dress should have a significance in courtship. I have, however, emphasized that the epigamic value of this plumage is subordinate to the cryptic one and said literally : " The development of *small* epigamic characters is very well compatible with the primary cryptic value of the summer plumage " (p. 332). When bearing in

mind that the establishment of the plumage is entirely pre-nuptial, that the courtship-display with its various antics takes place in this plumage, and that the scapulars and the ocular patch are very conspicuous and contrasting in their coloration, it is obvious that the summer dress must have an epigamic function too.

The main point in the argument of Mrs. Stresemann is the rejection of the autumn plumage. Without having examined a single specimen in this dress my critical investigation of a large series of material is entirely condemned. Birds in this dress may—according to Mrs. Stresemann—either be young birds or birds in second winter. " How can we know they are not young birds ? " she asks. Having handled hundreds of these birds it is easy for me to answer this question. The difference between the autumn-plumage and the juvenile and first-winter dresses are clear-cut ; there is a large gap between them which is not bridged by any specimen, i.e. there are no intermediates. Besides, some males in autumn-plumage have kept remnants of the eclipse-plumage, as described pp. 309–311 in my paper. So they could not be young birds ! It is as easy to explain why the autumn-plumage cannot be the second-winter dress. If it were so it would be worn the whole winter, but it is only found during the autumn ; not a single individual clad in the autumn-plumage has been found later than November (almost a hundred ad. ♂♂ from December to March examined). Moreover, all adult males from the period 25th September to 25th November (a total of 13 specimens examined) wear the autumn plumage, some still with remnants of the eclipse plumage, others showing various stages of the moult into the winter plumage ; even in the first half of December many birds have not yet quite finished the winter moult. This appears from the diagram on p. 317 in my paper. Not in a single case was a direct moult from eclipse- to winter-plumage observed. What can we deduce from all this ? When *all* adult males examined have a definite plumage in the autumn—and only in the autumn—the conclusion must be that all adult males actually exchange the eclipse-plumage with the autumn-plumage and from this moult into the ornamental or winter-plumage ; no other explanation is possible.

In 1944 I examined the entire material of Long-tailed Duck in various Swedish museums, a total of about 100 specimens. In all details they agreed with my previous material. I found three adult males collected in the autumn months, viz. from Sigtuna, 17th October, 1926 (in Zool. Inst. of Uppsala), and two from October in the private collection of Mr. Tage Adolfsson, Bohus-Björkö, all three specimens wearing the autumn plumage.

Mrs. Stresemann expresses her opinion as follows : " We do not believe in a special autumn plumage for which there seems to be no biological justification." To reject facts because they at present appear

to be inexplicable has nothing to do with science. There are other dresses in Ducks which seem to be completely useless, without any biological value, e.g. the plumage, more or less suppressed, which follows the male juvenile plumage in many Ducks, and as a rule is shed very soon, being replaced by the first ornamental plumage. This dress was described by Schiøler in most surface-feeding Ducks and in the genus *Aythya* (also mentioned in the descriptions in Witherby's *Handbook*, vol. 3), and I have recently described it also in the genus *Netta* (Dansk Ornith. Foren. Tidsskr., vol. 39, 1945, p. 209). Only in the Shoveler this plumage is kept for some time as a real " first-winter plumage ". I believe that this plumage, as well as the autumn-plumage of the Long-tailed Duck is a remnant of a phylogenetic older stage which is now receding and which no longer serves any biological function.

There is no doubt much more to learn about the complicated moult of the Long-tailed Duck, but what we need are critical and painstaking studies in the field and in the museum, not mere speculations.

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THE RE-BIRTH OF CLÈRES

By J. DELACOUR

Now and then a letter arrives from some corner of the world asking me for news of Clères. Has it been totally wrecked in the war, and have any of the birds survived the ordeal of invasion ?

I now realize that I never yet have written the whole story for this magazine where, along the years, news of my collections, big and small, can be found, whether I kept birds at Villers before 1918 or later on at Clères, including the accounts of their destruction.

When I saw Clères on 7th June, 1940, for the last time until the autumn of 1946, the grounds had already been bombed heavily twice, and many animals and birds had been killed ; but for craters and damaged trees, the park still looked lovely, with hundreds of creatures all about the place.

The German troops that arrived the next day caused, so I am told, little trouble ; they even saw that the birds were cared for. But things soon took a turn for the worse. Birds and animals were killed for fun or for the pot ; for example, my four precious breeding pairs of Andean Geese were eaten at Christmas time by soldiers ! Food became scarce ; Monsieur G. Olivier, who had kindly assumed the ungrateful charge of preserving Clères during the absence of Mr. Fooks, now a refugee in England as I was myself in America, had to dispose of a large part of the stock. Some birds were sold to dealers, others deposited at the Paris Zoos and

with Monsieur F. Edmond-Blanc. Valuable species, however, were kept at Clères, particularly Waterfowl, and the Gibbons. But destruction at the hands of the occupants was increasing, and my friends asked Professors Stresemann and Ghigi to intervene ; this they did promptly and successfully. During eighteen months Clères was neither occupied nor disturbed any more. But the situation deteriorated in 1943 and Clères was reoccupied. Civilians, drafted for the establishment of V1 bombs' launching rails in the vicinity, were stationed by the hundreds in our grounds. They proved more destructive than any troops before, breaking the fences and slaughtering animals and birds. In 1944, the German soldiers were demoralized and became more obnoxious ; they kept dogs and horses in the park, and they did much harm. But M. Olivier and André Brohart, the capable and devoted head-gardener, managed to repair the worst damage and to save a great deal. There were still Deer, Gibbons, and rare birds. Even Red-breasted Geese, Cape and Sharp-winged Teal bred during those years. More damage was done by bombs in 1944 and 1945, this time by Allied planes, and two terrible craters, 50 feet across, were made in the higher part of the park by German V1 bombs crashing soon after they had been launched. My friends were proud to have saved a nice lot of animals and birds when, on the very last day of the occupation, practically all were destroyed. It was a very bad stroke of luck ; S.S. troops, who had been prevented from crossing the Seine for several days by Allied bombing, managed to pass the river one foggy morning, and they went straight to Clères. Partly hunger and partly spite, they shot with tommy-guns everything alive they could find, just before they left for good. When Mr. Fooks was allowed to come to Clères in 1945, one Muntjac, one Crane, some Junglefowl, a Swan, and a few Ducks only remained.

Mr. Fooks had reported that, empty and spoiled as it was, Clères could be restored. I then decided that he should return, which he was eager to do, and resume managing the estate as he had done so well in the past twenty-five years. Despite tremendous difficulties, which further occupation by Allied troops did not alleviate although they proved helpful and considerate, most of the park, the gardens, and the aviaries were soon put into order. When I returned in September, 1946, I was agreeably surprised at the results of Mr. Fooks' work. The place looked much as before in a general way, and it was already fairly well stocked, thanks to the generosity of two of my English friends, Mr. Spedan Lewis, who had presented a fine collection of Pheasants and Waterfowl, and Major A. Pam, who had given many Wallabies and Geese. Also Professor A. Urbain, Director of Paris Museum, had returned birds which he had kept for us during the war, and loaned many others and some animals. It may be said here that I have bequeathed Clères and the adjoining property to the National

Museum in order to ensure its future as far as can be done in these troubled times. Mr. Fooks came to New York and brought home a large collection early in 1947.

Clères was officially reopened on 25th May, 1947, by M. André Marie, Vice-Premier and Minister of Justice, accompanied by all the authorities of Normandy, the British and American Consuls, the Director of the National Museum, and the delegates of numerous scientific institutions and societies ; many of my friends were there, among them Miss Barclay-Smith, Dr. Hindle, and Mr. Peter Scott, from England ; Mme J. M. Derscheid, Colonel and Mme J. Dufour, from Belgium. To me it was a very moving occasion.

Since that day Clères has been a public park, where visitors are admitted every day and may wander as they please, the gate takings paying for most of the upkeep. It is gratifying to state that they seem to appreciate it and cause little trouble. In the present circumstances, such an arrangement is the only way open to maintain the collections and to keep up the park. The days when such activities could be privately financed hobbies are, I am afraid, gone for ever.

As I have said previously, the general aspect has remained the same. The chateau, completely burnt inside, does not show any scars outside. The gardens are as usual, the rarer plants, which had disappeared, being gradually replaced. The main aviaries have been done up, as also a good part of the pheasantries, the rest being damaged beyond repair. The various pens inside the park have been re-established, and the general fencing reconditioned. The tropical houses and indoor bird galleries, however, are a total loss, and it is hardly worth while reconstructing them as long as fuel and special foods are not available ; it would also be almost impossible to procure to-day the rare small birds for which they had been planned.

Across the road the deer park is again well stocked with *Pseuxaxis* presented by M. Edmond-Blanc, but the enclosures and pens where so many Cranes, Rheas, Cassowaries, Ostriches, Geese, etc., used to live and breed have completely vanished, the fences and houses having been removed during the war. The rat-proof duckery alone has been partly repaired, and we hope to restore everything gradually. Given time and peace, Clères may one day regain its past splendour.

The collections, of course, are not yet up to the old standard. But they have made a good start and are progressing year by year. A number of rare species are again represented. Blackbucks and Moufflons from Vincennes, Wallabies from Wormley, Chinese Water-deer from Woburn roam the park with Reeves' Muntjacs which have been recaptured in the neighbouring woods. A couple of Barbary Apes live at liberty, but Gibbons have not yet been procurable. There are Rheas, Emus, Sarus, Demoiselle, and Crowned Cranes, also Wild

Turkeys and Red Junglefowl. The latter are the genuine wild birds and, owing to being shot at during the war, they have become so shy that they cannot be approached, flying off at 50 yards. They appear to be the only pure stock left in Europe.

Flamingoes, Black-necked Swans, many Peafowl, Pheasants, Geese, and Ducks have been sent recently from the United States, as well as a good collection of Doves bred in California.

The five kinds of Peafowl are now represented ; there are Blue and Brown Eared Pheasants, Monals, Temminck's Tragopans, Grey and Germain's Peacock Pheasants, Siamese Firebacks, Cheers, Sonnerat's Junglefowl, Edwards, Mikado, Versicolor, Elliot's, and all the commoner species of Pheasants. I could even obtain a pair of the rare Imperial Pheasant, which I discovered in Indo-China in 1923 ; there are still a few of them in American aviaries, all descendants from the original pair which bred at Clères for the first time in 1925 ; it is nice to see them again where their ancestors lived before. There are four species of Swans and a good collection of Geese, including Cereopsis, Ashy-headed, Ruddy-headed, Emperor, and Red-breasted, South African, and Paradise Sheldrakes, Fulvous Tree Ducks and all the more usual species of Ducks and Teal, and an old Sharpwing which survived all the trouble. Among the Doves, most of the Australian species are represented, including the pretty Brush Bronze-wing, Philippine Cuckoo-Doves, Grayson's, Bleeding-hearts, and African Blue-headed (*puella*). Budgerigars of many new colours, Fischer's Lovebirds make a good show in some of the aviaries, while a pre-war pair of King Parrakeets, which spent several years in a cage in Paris, have bred the last two seasons. There are also Stanleys, Crimson-wings, and a few other Parrakeets, two or three Amazons, and some Macaws. Other aviaries are well stocked with Glossy Starlings, Weavers, Whydahs, Waxbills, and other seed-eating birds from Senegal, easy to obtain in France at present. In spite of great difficulty with labour and food, a number of birds have been reared the last three years.

It is easy to imagine what an effort it was necessary to make to rehabilitate Clères. The credit for it goes almost entirely to Mr. Fooks, whose skill, courage, and devotion have overcome all obstacles. Although fate has decided, so it seems, that I shall spend the greatest part of my later years across the Atlantic, I would not consider the idea of abandoning Clères once it was certain that its revival was not a hopeless proposition. I am still much attached to it, and I cannot forget that I spent the best years of my life in making it the sort of place that I had always dreamed to have for a home, surrounded with the best that nature has to offer within a frame of order and beauty. As a home, Clères hardly exists for me to-day ; but the site remains, picturesque and harmonious. If I never again can completely enjoy

it as I did in the past, since so much I loved is missing, others can derive pleasure from it. It was, I think, my duty to preserve Clères to the utmost of my power for the country and for lovers of nature and art at large. The maintenance of the park and of the historic buildings also is important for many who, directly or indirectly, derive their livelihood from it. I am glad to say that my endeavour has been appreciated. I was touched by the gratitude and understanding of the people, and by the appreciative and helpful co-operation given us by the public authorities at Rouen and in Paris, and by friends abroad.

I spent many happy years at Clères, and it is with a somewhat nostalgic but real pleasure that I return there for short periods. In many ways, it is painfully different to-day, but it has kept a great deal of its former charm, and glorious memories still dwell under its tall trees, along its transparent waters, and in its ancient stones. And gorgeous birds still live, call, sing, and nest in the romantic old park.

* * *

THE " RED-AND-BLUE " MACAWS

By W. C. Osman Hill, M.D., F.Z.S.

Three species of large Macaws to which the above title is applicable have received scientific names. One of these, the smallest, is *Ara tricolor* Bechstein, which was confined to Cuba and the Isle of Pines and is now extinct (Rothschild, 1907). It was at first thought to be a variety of *A. macao*, but apart from this supposition it need not further trouble us here. The confusion I wish to clear up relates to the two larger surviving species—*A. macao* Linn. and *A. chloroptera* Gray, both of which may and have been described either as " red-and-blue " or " red-and-yellow ", yet they are very distinct. The confusion arose long ago and is probably attributable to the fact that the early naturalists had to content themselves with dried skins for reference, though this should not have prevented them from recognizing the striking differences in colour of plumage. I will discuss the two in order of their recognition by ornithologists.

(1) *Ara macao* Linn., 1758

First named by Linnaeus in 1758, the species was by him described (*Syst. Nat.*, p. 96) as *Psittacus macrourus ruber, remigibus supra coeruleis, subtus rufis, genis nudis rugosis*. The last quality—naked cheeks—fixes the type, for in the other species the cheeks, though largely naked, are distinctly marked by parallel tracts of small red feathers separated by intervening bare skin. Linnaeus later adds *tectricibus pluribus luteis*,

a feature which is constantly linked genetically with the naked cheeks. These characters therefore conclusively fix the name *macao* to the large red Macaw with completely naked cheeks and much yellow on the central feathers of the dorsal aspect of the wing.

Unfortunately, Linnaeus states that he based his description on a bird referred to by Marcgrav (1648) under the native (Tupi) name of *araracanga* ; but on consulting the latter author (p. 206) I find that he states that the bird had green on its wing. Linnaeus must have had other evidence—possibly captive specimens—he had casually observed and mentally registered the fact that some, at least, of these large red birds had yellow wings. This is, of course, mere surmise though it is obvious that confusion had already arisen.

Latham (1781) was aware of two different large red Macaws, one of which he terms the red-yellow-and-blue Macaw which is clearly the *macao* of Linnaeus's description, the other being labelled merely the " red-and-blue ". Shaw (1812), on the contrary, recognized but a single red Macaw which he terms *A. macao*, or scarlet Macaw. His figure, though uncoloured, depicts the Macaw of Linnaeus's description. Shaw's description is taken verbatim from Edwards (1743). He realized the existence of plumage variations, but attributed these to age factors.

Nevertheless, we have Spix, in 1824, describing as a " new " species, under the name *Arara macao*, a Macaw *coccineo-rubra, genis periophthalmiisque large nudis, plumuloso-rugosis*, and *tect. alarum maiores immac. virides*, all of which features are applicable to the bird noted by Marcgrav and referred to by Latham as red-and-blue Macaw, but which do not pertain to Linnaeus's *macao*. Spix, however, recognized the Linnean *macao* under the title *A. aracanga*, noting the *tectrices alarum majores aureo-flava* and also the fact that *supra et subtus miniaceus* (i.e. cinnabar-coloured) and *rugae genarum piloso-albae* in reference to the sparse, short, white hair-like plumes on the cheeks, in contrast to the feathered tracts of the other species. Spix, then, knew the two birds, but mixed up the names. He had plenty of later imitators ! Wied (1832), for instance, shortly followed with a description of " die roth Arara mit grünen Flügeldeckfedern " and rows of red feathers on its cheeks as *P. macao* L., but rightly claims the bird to be the *araracanga* of Marcgrav. He was obviously misled by his precursor Spix over the scientific name. He mentions, by the way, that the Cuban *A. tricolor* is probably a variety of the *araracanga*.

In the same year Lear's plates (1832) depict the red-and-yellow Macaw answering to the description of Linnaeus's *macao* under the name *Macrocercus aracanga*, i.e. with naked cheeks, central wing feathers yellow with green edges, the central rectices red with blue tips, and the lateral ones reddish-chocolate with blue tips, the most lateral pair blue throughout.

Brehm (1842) recognized two red Macaws, but persists in the transposition of their names. His *Macao Ara* is shown dark red with green centres on the wing-feathers and with *scattered* red feathers on the naked cheeks. He shows a black-tipped upper mandible. His *Araracanga-Papagei*, on the other hand, is figured red with much yellow on the wing-feathers, though this shades to green along their margins. The face is shown quite naked and the tip of the bill dusky with a smaller pigmented triangle at its base than in his " macao ". Clearly this second bird is the red-yellow-and-blue Macaw of Latham and the *Psittacus macao* of Linnaeus.

The next important work in this connection is the *Ornithologie brésilienne* of Descourtilz who, like Brehm, under the title *Ara araranga* describes the yellow-winged, naked-cheeked Macaw. His figure shows no black tip to the bill. He does not mention the green-winged Macaw. Pelzeln (1867), in a similar work, mentions both birds under correct specific names, using the generic name *Sittace*. Unfortunately, he gives the Portuguese title of *arara vermelha* to the wrong bird, i.e. to *S. chloroptera* (Gray).

Reichenow's well-known monograph (1878–1883) more or less corrects the position and gives adequate descriptive and pictorial evidence of the two birds. He, too, uses the generic name *Sittace* and describes *S. macao* as " hellrother Ara ", giving also the French name as *ara rouge*, and the English " red-and-blue " Macaw as distinct from " dunkelrother Ara ", *ara aux ailes verts*, but spoiling the account by the English " red-and-yellow " Macaw for *S. chloroptera*. Moreover, he uses the name Aracanga for *S. macao* which is not in accordance with Marcgrav's first usage.

Salvadori's British Museum Catalogue (1891) adds little, but under the synonymy of *A. macao* is listed the red-and-blue Macaw of Edwards and the red-yellow-and-blue of Latham.

The best published account overtopping not only all those listed so far but also those that have appeared since, is Penard and Penard's (1908) *De Vogeln van Guyana*. This applies both to descriptions and figures. *Ara macao* is termed *Scharlakenroode-Ara* with English equivalent " blue-and-red Macaw " whilst *A. choloroptera* is labelled *Bloedroode Ara*, anglicé " green-and-red Macaw ". Four years later, in the *List of the birds of South America*, Lord Brabourne and Chubb (1912) revert to " scarlet macaw " for *A. macao*, using the term " red-and-blue " Macaw for a species to which it had never previously been applied, i.e. Illiger's Macaw (*A. maracana*). *A. chloroptera* is further confused by calling it " red-and-yellow ". Chubb (1916) perpetuated these mistakes in his later publication, but Cory (1918) partly corrected the position by relabelling *A. chloroptera* " red-blue-and-green macaw ", though retaining " red-and-blue " for *A. maracana*.

This disquisition on the names applied to *A. macao* may suitably

be terminated by reference to the present-day standard work of the Marquess of Tavistock.[1] Here, the larger *A. macao* is wisely referred to as " red-and-yellow " whilst for *A. chloroptera* the rather ambiguous " red-and-blue " is perpetuated. It is noted that immature specimens of *A. macao* have more green on the wing than the adults.

(2) *Ara chloroptera* G. R. Gray, 1859

Marcgrav must be credited with the first recognition of the green-winged red Macaw, yet despite Linnaeus's assertion that he based his *macao* on Marcgrav's bird, the fact remains that Linnaeus's description is not applicable thereto. This Macaw received its scientific name *Ara chloropterus* [*sic*] from Gray only in 1859. But it is debatable whether or not Gray's name should be regarded as *nomen nudum*. It appears merely as an item in a list and is not accompanied by a description—unless the English vernacular title " green-winged Macaw " be regarded as adequately distinguishing the bird. Probably it does, and it is pretty clear which bird Gray had in mind ; nevertheless, it does not conform to what is ordinarily understood by a description, though possibly sufficient to satisfy Article 25 of the International Rules in so far as " green-winged " is an " indication ". Sclater (1859) at once accepted Gray's name modifying the spelling to suit better the generic name *Ara*. The only earlier names are *brasiliensis* used by Brisson in 1760—usually regarded as non-binomial. The specific name *aracanga* ought by rights to be available, since it derives from Marcgrav, but unfortunately, from Gmelin (1788) onwards, it has been transferred to the Macaw whose proper name is *macao*, which name has priority. Since Gray's time all ornithologists who have recognized the bird have employed his name.

Muddle, however, has been omnipresent with regard to vernacular names, especially in English. Though German writers have fairly consistently recognized the present species as *dunkelrother Ara* in contrast to the *hellrother Ara* (for *A. macao*) in English the terms red-and-blue, red-and-yellow, green-and-red, or red-blue-and-green have been promiscuously employed, whilst some of these have also been used for the previous species and, one at least, for a totally different bird from either of those at present under consideration ! (*Vide supra.*)

Personal Observations and Recommendations

It is pretty clear that two birds of similar size and generally similar in appearance have been long confused, yet are quite distinct. These

[1] I omit Green (1884) since he deals only with *A. macao*, which he terms " red-and-blue Macaw ".

are adequately labelled scientifically as *Ara macao* and *Ara chloroptera* and they may be distinguished as follows :—

	A. macao.	*A. chloroptera.*
Size	Slightly the larger (total length, 36 inches).	Slightly the smaller (total length, 34 inches).
General colour of plumage	Scarlet.	Crimson.
Central wing feathers .	Yellow tipped with green (greener in immature bird).	Median wing coverts olive-green, greater blue ; innermost greater upper wing coverts and scapulars olive-green, more or less tinged with blue.
Inner rectrices . .	Scarlet, with purplish blue tinge at base and tip.	Dark red with blue tip.
Outer rectrices . .	Blue with some reddish-chocolate at base.	Maroon at base, with blue tip.
Cheeks	Naked with sparse, whitish piles.	Naked tract traversed by six or seven curved rows or dark red short feathers coursing forwards and curving upwards beneath the eye. (This is a different arrangement from the tracts of black feathers seen on the cheeks of *A. ararauna*.)
Upper rhamphotheca .	Whitish horn colour with large triangular black area at base of its lower margin. Tip often black also.	Similar but with smaller area of black at base.
Iris	Yellowish-white " Hochgelb " according to Reichenow.	" Straw-yellow."

There is no evidence that the two kinds interbreed in nature, and they have always been regarded as distinct species, not as geographical variants of one form.[1] They do, however, interbreed in captivity, for Mr. G. S. Mottershead informs me that in 1947 three eggs were laid by a female *A. chloroptera* that had lived in the same aviary as a male *A. macao*. One of these was infertile, but the other two were hatched, one baby being killed almost at once, but the other lived for six weeks. The babies were very small, " no bigger than a man's thumb."

What are we to call these Macaws in English ? In the first place, the name " red-and-blue " ought to be scrapped for obvious reasons. In fact, all these cumbersome descriptive titles based on different colours linked by the conjunction " and " are undesirable. For *A. macao* the name Scarlet Macaw is to be recommended ; it has been used before ; it corresponds well with the German *hellrother Ara*, the French *Ara rouge*, and the Portuguese *Ara vermelha*. For *A. chloroptera* we cannot do better than perpetuate Gray's " Green-winged Macaw ".

[1] Peters (Check list) refers to a subspecies *A. chloroptera major* of *chloroptera*, presumably larger than the typical form described by Bertoni in 1901 (*An. Cient. Paraguayos* (i), no. 1, p. 52, to which I have not had access).

References to Literature

Bertoni. 1901. *Ann. Cient. Paraguayos* (1), 52.
Brabourne, Lord, and Chubb, C. 1912. *A List of the Birds of South America.*
Brehm, C. L. 1842. *Monographie der Papageien*, Jena.
Chubb, C. 1916. *Birds of British Guiana*, London.
Cory, C. B. 1918. *Cat. Birds of the Americas*, Pt. II, No. 1. Chicago.
Descourtilz, J. T. 1852. *Ornithologie bresilienne ou Histoire naturelle des oiseaux du Bresil.* Rio de Janeiro.
Edwards, G. 1743. *Natural History of Birds.* London.
Gray, G. R. 1859. *List of the Specimens of Birds in the Collection of the British Museum*, Pt. III, sect. 2, Psittacidae, 26.
—— 1870. *Handlist*, ii, 144.
Green, W. J. 1884. *Parrots in Captivity*, G. Bell, London, II, 69–74.
Latham, J. 1781. *General Synopsis of Birds.* London.
Lear, E. 1832. *Illustrations of the family Psittacidae.* London.
Linnaeus, C. 1758. *Syst. Nat.* ed. X, 96, Holmiae.
Marcgrav, G. 1648. In Piso, G. *Historia rerum naturalium* Brasiliae, Amstelodami.
von Pelzeln, A. 1867. *Zur Ornithologie Brasiliens*, Wien, 254–5.
Penard, F. P., and Penard, A. P. 1908. *De Vogels van Guyana*, Paramaribo.
Peters, J. L. 1946. *Check-list of Birds of the World*, III, 182.
Reichenow, A. 1878–1883. *Papageien*, Kassel.
Rothschild, Hon. W. 1907. *Extinct Birds.*
Salvadori, T. 1891. *Catalogue of Birds in the British Museum*, XX.
Sclater, P. L. 1859. *Proc. Zool. Soc. Lond.*, 453.
Shaw, G. 1812. *Gen. Zool.*, Aves, VIII, pt. 2, 336–9.
Spix, J. B. 1824. *Avium species novae*, Monachii.
Tavistock, Marquess of. n.d. *Parrots and Parrot-like Birds.*
von Wied, Prince Max. 1832. *Beitrage zur Naturgeschichte von Brasilien*, IV, 38.

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I have to express my appreciation to Miss P. M. Thomas, Librarian, Tring Museum, for her assistance with the earlier literature on the South American Parrots.

* * *

NOTES ON BIRDS IN KENYA, UGANDA, AND TANGANYIKA

By Andrew Wilson

Shortly before I left Glasgow for East Africa in January, 1947, a friend, a retired district commissioner in Uganda, said to me, "Africa is a country where you will change your mind about many things." I now know how right he was, for my two visits to "The Dark Continent", January to March, 1947, and January to April, 1948, demonstrated that much that I thought to be quite simple turned out to be not so simple as one was led to believe.

For instance, I held the common belief that tropical Finches, the common kind that were imported in their thousands before the war, could be caught by the hundreds, that they went about in huge flocks, and all you had to do was to set your traps, and, Hi Presto! you had more birds than you had cages to house.

How different we found the real picture. With a few exceptions which I will mention later, most of the birds we saw were in ones and twos, and although we covered nearly 6,000 miles by car, we could never say that birds of any kind were plentiful. So that the old adage " Birds of a feather flock together " did not apply at the time of the year when we were there.

Lest I be misunderstood, I hasten to say that we did see some wonderful birds in their wild state. The following list will indicate that East Africa holds some wonderful birds, birds that are a joy to behold, birds that are like living jewels when in flight, birds that are a feast for the eyes, birds that would bring joy to many in aviaries in this country, *if*—and it's a great big *if*—the stupid regulations and orders that have now become part of our everyday life did not prevent them from being imported unless for Zoos and for medical research purposes.

Here is the list. Fire Finches, Senegal Waxbills, Melba Finches, Cordon Bleus, various Wydahs including the Delemere, Violet and Grenedere Waxbills, Spreo, Royal and Violet-eared Glossy Starlings, Shrikes, Barbets, White-eyes, Puffbacks, Cuckoos, Turocous, Blue Jays, Hoopoes, Bee-eaters, Doves, Egrets, Bulbuls, Swifts and Swallows, Herons, Wagtails, Golden Orioles, Weaver Birds, Nightjars, Woodpeckers, Vultures, Hawks, Eagles, Owls, Guinea Fowl—three species —Secretary Birds, Crowned Cranes, Quails, Cormorants, Storks, Tick Birds—on the necks of Giraffes and cattle—Ostriches, Flamingoes, Francolins, Hornbills, White-necked Crows, Harriers, Ibis, Kingfishers, Ducks, Hammerkops, and last, but not least, numerous species of Sunbirds.

As I have already said, we found most of these in ones and twos ; for instance in most compounds we were almost sure to find a pair of Sunbirds, usually Malachite (*Necterinia famosa*), the probable reason for one pair only being on account of the quarrelsome disposition of these beautiful little birds.

Then, wherever we found wild fig trees growing we always found Mouse Birds (*Colius striatus*), and it was easy to see why they got their name. They run up and down the branches like mice, using their tails in the same fashion as Woodpeckers, hanging on to the ripe fruit, sometimes in upside-down positions like Tits. They are certainly most interesting birds to watch. It's a pity they don't do well in aviaries, not because they are difficult to keep, but on account of the fact that their tails get destroyed on the wire netting and this takes away their feature of particular attraction.

My wife and I stayed for a period at Shanzu Beach Hotel, 10 miles from Mombasa, where a never-ending source of amusement was the group of Weavers that monopolized two palm trees that grew on the foreshore, a few yards from the door of our room, or " Banda ".

These industrious birds started work at dawn, repairing, adding to, and building new nests ; nests that are indeed works of art in structure and in shape. The last job at dusk appeared to be feeding the young ; when this was finished silence reigned supreme, such a contrast to the activities and noise of daytime and as sudden as if one switched off an electric light ; nor does the simile end there for there is little twilight in Africa.

We were fortunate in finding a group of Crowned Cranes, about 200, in a clearing a few miles from Nairobi. They were feeding on grass, grasshoppers, and other insects. When not thus engaged they performed dances that put one in mind of clowns in a circus. When disturbed they took to the air, got into line of formation as if under the orders of a sergeant-major, flew around in a circle and landed in an adjoining field allowing us to get near enough to take a cine picture. This picture, however, did not come out because the native who did the developing used hypo for developing and developer for fixing.

It may be of interest to give particulars of how the natives catch these Cranes. A hole, sufficient to hold two " Boys " is dug, then covered over with brushwood to resemble the surrounding ground. For a few days grain is scattered near the hole thus encouraging the birds to feed at this spot. One day two natives get into the hole, cover it over as formerly, wait until the birds come near enough, grasp them by the legs and pull them into the hole. Seldom are more than two a day caught by this method. The Cranes appear to get wise to it and steer clear of the hole for days or even weeks.

Regarding Flamingoes, I was informed that owing to the fact that all East African Flamingoes feed on the small plants, snails, fish, etc., of a particular kind that are only found in the swamps at the edge of the soda lakes,[1] it is impossible to keep them alive in captivity ; that unlike Egyptian Flamingoes they will not thrive on shredded shrimps, soaked grain, or meat scraps. Whether this is so or not I cannot answer, but it is the common belief in East Africa, so common that no one appears to have tried the experiment ; in point of fact I was astonished at the lack of interest in aviculture, as we know it in this country. In all my search I only found one private person with an aviary and therein were a very indifferent pair of Green Budgerigars. A few dealers have aviaries with the larger types of birds, Turocous, Cranes, Ostriches, etc., housed near leopards, hyenas, etc. I would account for this lack of interest in the smaller beautiful birds to the fact that everyone's attention appears to be focused on the big game that abounds in Kenya, Uganda, and Tanganyika, the shooting of which appears to be a greater conquest than keeping the magnificent feathered creatures alive in aviaries.

[1] Most of the lakes in Kenya contain a large proportion of soda.

BRITISH AVICULTURISTS' CLUB

The sixteenth meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, South Kensington, S.W. 7, on Tuesday, 15th March, 1949, at 6 p.m., followed by a dinner.

Chairman : Dr. M. Amsler.

Members of the Club : Miss P. Barclay-Smith (Vice-Chairman), Miss K. Bonner, T. Crewes, B. H. Dulanty, O. E. Dunmore, A. Ezra (Patron), J. F. M. Floyd, Tom Goodwin, Frank Grant, R. E. Heath, Dr. E. Hindle, Terry Jones, Miss E. M. Knobel (Club Hostess), Miss M. H. Knobel-Harman, G. S. Mottershead, K. A. Norris, A. A. Prestwich (Hon. Secretary), D. H. S. Risdon, A. E. Sibley, E. N. T. Vane, R. C. Witting, H. Wallace Wood.

Guest of Honour : Mme. Jeanne Derscheid.

Guests : Mrs. Carson-Roberts, R. A. H. Coombes, R. D. Etchécopar, Miss Ruth Ezra, Mrs. Frank Grant, Roland Green, K. A. Norris, C. S. Webb.

Members of the Club, 23 ; guests, 9 ; total 32.

The Chairman said it gave him very great pleasure to welcome Mme. Jeanne Derscheid as a Guest of Honour. The articles of the late Dr. Derscheid were well known to all readers of the *Avicultural Magazine*. What impressed him so much was the wonderful courage of the man, who could not only write articles on birds, but also illustrate them while under the terrible conditions of imprisonment. Dr. Derscheid held a unique place in the affections of British aviculturists, and the Club was honoured and proud to pay tribute to his memory through Mme. Derscheid.

The Club presented a bouquet of red carnations, tied with the Belgian national colours, to Mme. Derscheid as a token of regard.

Another very welcome guest was M. R. D. Etchécopar, Secrétaire général, La Société Ornithologique de France.

M. Etchécopar said he felt very flattered to be asked to attend, especially as he was not an aviculturist but an ornithologist. He described briefly the difficulties experienced in producing *L'Oiseau* during the war, but thought that in future this journal would be published at regular intervals.

Mr. K. A. Norris showed a selection of his remarkable, hand-coloured slides. The series represented the birds of marshland and foreshore in Holland. Some idea of the ground covered may be gathered from the following : Little Black Tern, Purple Heron, Montagu's Harrier with nest of three young ones in varying stages of development, Long-eared and Short-eared Owls brooding, Avocet, Redshank, Black-tailed Godwit, Ruff in display and Reeve, Kestrel and nest on ground in heather, Kentish Plover, Ringed Plover and

young, Heron colony in the centre of Rotterdam, and a rookery of some two thousand pairs of Cormorants near Rotterdam.

The Chairman, thanking Mr. Norris, said it was one of the finest and most interesting exhibitions he remembered seeing, and he warmly congratulated him on his skill and success as a photographer. These remarks were reflected in the sustained applause accorded Mr. Norris.

The date of the next meeting is Wednesday, **11th May.** It is hoped that M. Jean Delacour will be present.

Many members do not seem to appreciate the importance of the meeting notice cards. At most of the dinners there are members who have not expressed their intention to be present. To enable the Secretary to complete the organization of the dinners the cards **must** be used.

ARTHUR A. PRESTWICH,
Hon. Secretary.

* * *

PERSONALIA

The Duke of Palmella, Portuguese Ambassador, has presented four Spanish Blue Magpies to the London Zoo. The Duke brought them from Sesimbra, south of Lisbon, when he returned to this country earlier in the year.

Sydney Porter, the much-travelled, has been wintering in California. He has been staying with F. H. Rudkin, jun., and has visited many of the larger aviaries. At the last time of writing he was waiting for the snows to clear on the mountains before going up to endeavour to see the now very scarce California Condor.

A. H. Scott has, as usual, been wintering in Switzerland. Writing from Crans-sur-Sierre, he says : " This is the most bird-less Swiss resort I've yet struck. Hundreds and hundreds of rowan trees all loaded with berries, though leaves are gone, and not a bird to eat them. Even above 6,000 ft. there are usually Bullfinches to eat them off. Years ago I caught some in St. Moritz, and brought them back to England."

Dave Bush, writing at the end of January, says : " Just returned from New Guinea. We leave for London, via Africa, on the *Nestor* from Sydney about 9th February. I suppose it will be about the end of March when we arrive in London. Had a very nice trip and brought back the following varieties of stock, some of which were secured by Fred Shaw Mayer : Great Palm Cockatoos, Eclectus, Alpine, Fig or Double-eyed Parrots, White-rumped Lories, Varied Lorikeets,

Blue-capped Keets, Caldwell's and MacGregor's Bower Birds, Hawks, Cassowaries, Brush Turkeys, six species of Birds of Paradise, Hornbills, Pesquet's Parrots, Blue-face Parrot Finches, and Tree Kangaroos.

Jean Delacour plans to leave New York for Paris on 2nd May, and all being well will attend the B.A.C. meeting on 11th May. He also hopes to be at Foxwarren Park on 28th May.

Dr. E. Hopkinson, believed to be the original of Edgar Wallace's *Sanders of the River*, celebrated his 80th birthday on 31st March, 1949. Dr. Hopkinson has been a member of the Society since 1906 and a Vice-President for the past twenty-five years.

B. H. Dulanty headed the National Council of Aviculture deputation to the House of Commons on 16th March to suggest amendments to the Pet Animals Bill. The deputation, which also included C. R. Freeman and E. N. T. Vane, was given a sympathetic hearing by Brigadier C. H. M. Peto.

A. A. P.

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NOTES

AVICULTURAL SOCIETY OF SOUTH AUSTRALIA: THE MEDAL AWARDS.

Dr. Alan Lendon has kindly sent information that the Medal of the Avicultural Society of South Australia has been awarded for the following breeding successes during 1948:—

C. K. Knuckey, for Yellow Seed-eater (*Serinus sulphuratus*).
C. K. Knuckey, for Natal Fire Finch (*Lagonosticta rubricata*).
C. K. Knuckey, for Rock Bunting (*Fringillaria tahapisi*).
C. K. Knuckey, for Rufous-backed Mannikin (*Spermestes nigriceps*).
A. H. Lendon, for Golden-mantled Rosella (*Platycercus splendidus*).
A. H. Lendon, for Pileated Parrakeet (*Purpureicephalus spurius*).

The Silver Medal for the outstanding breeding achievement of the year was awarded to Dr. Lendon for the Pileated Parrakeet.

Dr. Lendon writes:—

"All Mr. Knuckey's breedings were from the shipment of African birds received by him in 1947 and referred to in my previous letter (A.M., 1948, 97); there are still several others that he may succeed in breeding. In contrast to last year, you will notice that no softbills were bred. Mr. McKechnie twice hatched a young Southern Scrub Robin (*Drymodes brunneopygius*), but on each occasion the young bird disappeared on the day of hatching."

A. A. P.

AVIAN IMPORTS.

Several readers have inquired whether it is possible to clarify the situation regarding the importation of birds.

The following extracts are from a recent letter from a very high-ranking official of the Board of Trade and explain the reasoning behind their policy:—

"The restrictions on these imports are due to the ever-present problem of our balance of payments. The amounts involved may not seem large but these small items, when taken together, tend to add up to quite a substantial sum. Once we

commence to relax upon the import restrictions there is the problem of deciding which items merit first consideration and I think you will agree that birds and pets could not come very high on the list.

" There is a particular difficulty in the case of seed-eating birds in that supplies of bird seed are insufficient to meet current needs and these supplies can only be increased at the expense of other types of feeding-stuffs. The same sort of problem arises, to a limited degree, on imports of other types of pets.

" Some import licences are issued for imports intended for educational or research purposes, such as the imports by zoos, but these relate in the main to transactions which do not call for any expenditure of foreign currency. Also imports are permitted for total re-export provided the business results in a currency profit to this country : this is in keeping with our policy to foster entrepôt trade but the benefits of such trade would be largely dissipated if we were to allow some of the imports to remain in this country, also we obviously could not permit a tolerance of this nature in the case of birds and pets without considering a similar concession on other commodities, and the loss of potential currency earnings would be correspondingly increased.

" . . . (regarding) the facilities already accorded to imports of quadrupeds from the British Empire. The volume of these imports, apart from agricultural livestock, is not large and generally they relate to types which serve a useful purpose in our economy : the policy is kept under review and further restrictions will be imposed should these prove necessary."

A. A. P.

ADDITIONS TO THE LONDON ZOO.

December, 1948.—There were nineteen new arrivals during the month. The more noteworthy were a Cinnamomeous Kestrel (*Falco cinnamominus*), caught on board ship off S. America ; 2 American Kestrels (*Falco sparverius*), received in exchange from the National Zoological Park, Washington ; 2 Little Crakes (*Porzana parva*), 1 Water Rail (*Rallus aquaticus*) ; and 2 Black-footed Penguins, bred in the Menagerie.

Whipsnade.—4 North American Turkeys, 20 Mallard, and 70 Red Jungle Fowl were recorded as bred in the Park during 1948.

January, 1949.—The sixteen new arrivals included one Gaboon Speckled Tinker Bird (*Pogoniulus scolopaceus flavisquamatus*), a species new to the collection, deposited ; 2 Brown Pelicans (*Pelecanus occidentalis*) received in exchange from the Royal Zoological Society of Ireland ; 4 Spanish Blue Magpies (*Cyanopica cyanus cooki*) presented by the Duke of Palmella ; 2 Japanese White-necked Cranes (*Megalornis leucauchen*) presented by Mr. A. Ezra ; and 1 Black-footed Penguin (*Spheniscus demersus*) bred in the Menagerie.

A. A. P.

THE " CRYSTAL PALACE " SHOW.

The seventy-sixth " Crystal Palace " Championship Show of Cage Birds was held at the Royal Horticultural Hall, Westminster, on 20th, 21st, and 22nd January, 1949.

The fourteen classes for foreign birds attracted 113 entries and were judged by Mr. D. H. S. Risdon.

The Championship Trophy winners were :—

Foreign Parrot-like : Mr. C. Laidman, Plum-headed Parrakeet.
Foreign Seedeater : Mr. T. Crewes, Golden-breasted Buntings.
Foreign Insectivorous : Mr. H. J. Indge, Bengal Pitta.

The winners of first prizes were : Mr. P. H. Alderson, Levaillant's Amazon ; Mr. R. Best, Peach-faced Lovebirds ; Mrs. D. K. Draper, Golden-mantled Rosellas ; Mr. H. J. Indge, Barraband's Parrakeets ; Mr. H. J. Indge, Queen Alexandra's Parrakeets ; Mr. C. Laidman, Plum-headed Parrakeet ; Mrs. D. K. Draper, St. Helena Waxbills ; Mr. S. N. Pinfield, Tricoloured Mannikins ; Mr. T. Crewes, Red-headed Parrot Finches ; Mr. T. Crewes, Golden-breasted Buntings ; Mr. T. Crewes, Zosterops ; Mr. H. J. Indge, Bengal Pitta ; Mr. T. Corrall, Occipital Blue Pies ; Mr. J. E. Williams, Turquoisine × Blue-winged Grass Parrakeet.

Mr. J. Clinton Bond, late Curator of the McMahon Museum, Quetta, sent a number of non-competitive exhibits, five Eastern Goldfinches, four Pink-winged Desert Finches, and a pair of Red-mantled Rose Finches. The two first named were all males, but I am given to understand a number of females had been kept at home.

The only exhibit from abroad was a Venezuelan Siskin × Roller Canary, flown from Paris. This " Red Canary " proved a great attraction, but for some unknown reason it was labelled as having an " Abyssinian Siskin " as a parent.

A. A. P.

THE JOHN FROSTICK MEMORIAL CUP.

T. Crewes was the winner of this Cup at the " Crystal Palace " Show. His four nominated foreign birds scored 27 points ; three firsts and one second.

GREY PARROT BRED AT BRIGHTON.

Considerable interest was caused at the recent National Show by a young Grey Parrot exhibited by H. A. Avery. It was labelled " Bred at Brighton " ; and its parents were also on show. Avery then gave me brief particulars and in confirmation writes as follows :—

> " Regarding the young African Grey, this was born in about April, 1946, and is probably about thirty-two months old. It was born out of doors in a secluded and sheltered aviary. The parents made the nest on the ground after I had removed the nesting-boxes—having made six previous attempts, all of which were very disappointing, I eventually decided to give them a rest. I had two pairs of Greys in flights adjoining, and the six previous attempts were made with these four birds. This last nest contained two eggs ; one with chick dead in shell, practically fully developed, and the other produced the bird you saw at the Show. I left the parents to themselves only placing daily a supply of soft and ordinary food."

This noteworthy breeding success was, of course, about a year after E. J. Boosey's.

A. A. P.

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CANDIDATES FOR ELECTION

M. Barnard-Hankey, Plush Dorset. Proposed by A. A. Prestwich.
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J. W. Clemitson, 25 St. Paul's Gardens, Whitley Bay, Northumberland. Proposed by A. A. Prestwich.
G. H. Crone, "Vyverhof," Lage Vuursche, Holland. Proposed by A. F. C. A. van Heyst.
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Charles G. Jones, 516 Summit No., Seattle 13, Washington, U.S.A. Proposed by A. A. Prestwich.
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Calvin Ragan, P.O. Box 7, Bell, California, U.S.A. Proposed by A. A. Prestwich.
Mrs. M. Ruth Sayles, 48 Everett Street, East Orange, New Jersey, U.S.A. Proposed by A. A. Prestwich.
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Lawrence N. Taylor, Shadowhurst Farm, Glen Moore, Pa., U.S.A. Proposed by A. A. Prestwich.
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Female Hooded Crane, tame and in perfect condition; offers wanted. 1948 female Golden Pheasants, £3. Breeding pair Upland Geese, £10. Caracara, £6. A. F. MOODY, Lilford, Oundle, Peterborough.

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